- Hello, my name is Michael Lichtenberg from Arnsberg Vascular Clinic in Germany. It's a pleasure to be here today. I will report today, on the MIMICS-3D two-year clinical outcome data for the BioMimic 3D Stent. Yes, in a real world population.

Can you briefly tell us about the BioMimics 3D Stent system?

So, the BioMimics 3D is a new generation of stent. It's a swirling flow stent. This stent imparts non-planar curvature to stented femoropopliteal segments, which then generates a swirling flow, providing an antiproliferative effect without the need for a drug. The typical characteristic of this stent is the helical centreline. It's very simple and accurate to place the stent using a standard delivery system.

What was the study design of MIMICS 3D?

So, the MIMICS-3D Registry is a prospective multi-center observation study to elevate the BioMimic-3D Stent in peripheral artery disease. In the real world we included 507 patients in 43 investigational sites.

What are the key findings?

So, we treated a very challenging population in this Biomimics 3D Registry. 24% of these patients had a critical limb ischemia and we treated longer and more complex lesions. But with this stent, we could find the primary patency rate at two-years of 78% and Kaplan-Meier freedom from clinically-driven TLR two-years of 83%. Interestingly, we did not find any statistical difference in clinically-driven TLR between drug-coated balloon and non-drug coated balloon cohorts as in this registry DCB or non-DCB interventions were allowed. So, there were comparable outcomes to be seen to drug-eluting stents and even as a Supera Stent, when we compare these outcomes data from the BioMimics 3D Stent with these two types of scaffolds. So, even that we included more challenging lesions without the need for extensive lesion preparation, we had the same results like drug-eluting stents, and Supera Stent trials showed.

In which situations would you suggest the use of this stent?

So, this type of stent can be used in, I think in many indications but interestingly as the stent really helps to treat severe long complex lesions, it is now my first choice, especially for patients with critical limb ischemia and longer and complex lesions.

What are the next steps?

So, the next step is definitely to get even more experienced with this stent also in other indications. So, looking for example into the common femoral artery, for example, if this is an artery towards here, and of course we would like to see if this stent also helps, especially in the popliteal area as this stent was not evaluated in popliteal segment two and three in this registry.